

# System Test Plan for BankCalculator

The text in bold in the **Description** column represents the test inputs to the program. You can stop program execution by pressing Ctrl+C. You will need to fill in your Actual Results for the given tests and write the six additional tests, including actual results (highlighted in **yellow**). Be sure to add your name as the author for the tests you write.

Test ID	Description	Expected Results	Actual Results																																																								
testMenu  Author: Dr. Balik	<i>Preconditions:</i> BankCalculator program started  <ctrl + c to exit>	Bank Calculator - Please choose an option.  L - Loan D - Deposit Q - Quit  Option:	Bank Calculator - Please choose an option.  L - Loan D - Deposit Q - Quit  Option:																																																								
testInvalidOptionWithMoreThanOneCharacter  Author: Dr. Balik	<i>Preconditions:</i> BankCalculator program started  Bank Calculator - Please choose an option.  L - Loan D - Deposit Q - Quit  Option: <b>loan</b> Invalid option  <ctrl + c to exit>	Invalid option  Menu is redisplayed	Invalid option  Menu is redisplayed																																																								
testLoanInterest8To9  Author: Dr. Balik	<i>Preconditions:</i> BankCalculator program started  Bank Calculator - Please choose an option.  L - Loan D - Deposit Q - Quit  Option: L Amount: 25000 Minimum interest rate: 8 Maximum interest rate: 9  <ctrl + c to exit>	<div>Monthly Payment</div> <table><tr><td>Interest</td><td>12 mos</td><td>24 mos</td><td>36 mos</td><td>48 mos</td><td>60 mos</td><td>72 mos</td></tr><tr><td>-----</td><td>-----</td><td>-----</td><td>-----</td><td>-----</td><td>-----</td><td>-----</td></tr><tr><td>8%</td><td>2174.71</td><td>1130.68</td><td>783.41</td><td>610.32</td><td>506.91</td><td>438.33</td></tr><tr><td>9%</td><td>2186.29</td><td>1142.12</td><td>794.99</td><td>622.13</td><td>518.96</td><td>450.64</td></tr></table>  Menu is redisplayed	Interest	12 mos	24 mos	36 mos	48 mos	60 mos	72 mos	-----	-----	-----	-----	-----	-----	-----	8%	2174.71	1130.68	783.41	610.32	506.91	438.33	9%	2186.29	1142.12	794.99	622.13	518.96	450.64	<div>Monthly Payment</div> <table><tr><td>Interest</td><td>12 mos</td><td>24 mos</td><td>36 mos</td><td>48 mos</td><td>60 mos</td><td>72 mos</td></tr><tr><td>-----</td><td>-----</td><td>-----</td><td>-----</td><td>-----</td><td>-----</td><td>-----</td></tr><tr><td>8%</td><td>2174.71</td><td>1130.68</td><td>783.41</td><td>610.32</td><td>506.91</td><td>438.33</td></tr><tr><td>9%</td><td>2186.29</td><td>1142.12</td><td>794.99</td><td>622.13</td><td>518.96</td><td>450.64</td></tr></table>  Menu is redisplayed	Interest	12 mos	24 mos	36 mos	48 mos	60 mos	72 mos	-----	-----	-----	-----	-----	-----	-----	8%	2174.71	1130.68	783.41	610.32	506.91	438.33	9%	2186.29	1142.12	794.99	622.13	518.96	450.64
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Test ID	Description	Expected Results				Actual Results			
testDepositInterest3Years5  Author: Dr. Balik	<i>Preconditions:</i> BankCalculator program started	Final Amount				Final Amount			
	Bank Calculator - Please choose an option.  L - Loan D - Deposit Q - Quit  Option: D Amount: 2345 Years: 5 Minimum interest rate: 3 Maximum interest rate: 3  <ctrl + c to exit>	Interest ----- 3%	No Compounding ----- 2696.75	Monthly Compounding ----- 2723.99	Continuous Compounding ----- 2724.50	Interest ----- 3%	No Compounding ----- 2696.75	Monthly Compounding ----- 2723.99	Continuous Compounding ----- 2724.50
testNegativeLoanAmount  Author: Eric Samuel	<i>Preconditions:</i> BankCalculator program started	Invalid value				Invalid value			
	Bank Calculator - Please choose an option.  L - Loan D - Deposit Q - Quit  Option: L Amount: -1000 Invalid value  <ctrl + c to exit>	Menu is redisplayed				Menu is redisplayed			
testDepositAmountValidBoundary  Author: Eric Samuel	<i>Preconditions:</i> BankCalculator program started	Final Amount				Final Amount			
	Bank Calculator - Please choose an option.  L - Loan D - Deposit Q - Quit  Option: D Amount: 1 Years: 10	Interest ----- 3%	No Compounding ----- 1.30	Monthly Compounding ----- 1.35	Continuous Compounding ----- 1.35	Interest ----- 3%	No Compounding ----- 1.30	Monthly Compounding ----- 1.35	Continuous Compounding ----- 1.35
		Menu is redisplayed				Menu is redisplayed			

	<div>Minimum interest rate: 3 Maximum interest rate: 3</div> <div>&lt;ctrl + c to exit&gt;</div>																																																										
<div>testInvalidLoanMinimumInterestRateBoundary</div> <div>Author: Eric Samel</div>	<div>Preconditions: BankCalculator program started</div> <div>Bank Calculator - Please choose an option.</div> <div>L - Loan D - Deposit Q - Quit</div> <div>Option: L Amount: 1000 Minimum interest rate: 0 Invalid value</div> <div>&lt;ctrl + c to exit&gt;</div>	<div>Invalid value</div> <div>Menu is redisplayed</div>	<div>Invalid value</div> <div>Menu is redisplayed</div>																																																								
<div>testCombinationNumberAndLettersOptionInput</div> <div>Author: Eric Samuel</div>	<div>Preconditions: BankCalculator program started</div> <div>Bank Calculator - Please choose an option.</div> <div>L - Loan D - Deposit Q - Quit</div> <div>Option: sdli293 Invalid option</div> <div>&lt;ctrl + c to exit&gt;</div>	<div>Invalid option</div> <div>Menu is redisplayed</div>	<div>Invalid option</div> <div>Menu is redisplayed</div>																																																								
<div>testLoanInterest1to2</div> <div>Author: Eric Samuel</div>	<div>Preconditions: BankCalculator program started</div> <div>Bank Calculator - Please choose an option.</div> <div>L - Loan D - Deposit Q - Quit</div> <div>Option: L Amount: 1000 Minimum interest rate: 1 Maximum interest rate: 2</div> <div>&lt;ctrl + c to exit&gt;</div>	<div>Monthly Payment</div> <table><tr><td>Interest</td><td>12 mos</td><td>24 mos</td><td>36 mos</td><td>48 mos</td><td>60 mos</td><td>72 mos</td></tr><tr><td>-----</td><td>-----</td><td>-----</td><td>-----</td><td>-----</td><td>-----</td><td>-----</td></tr><tr><td>1%</td><td>83.79</td><td>42.10</td><td>28.21</td><td>21.26</td><td>17.09</td><td>14.32</td></tr><tr><td>2%</td><td>84.24</td><td>42.54</td><td>28.64</td><td>21.70</td><td>17.53</td><td>14.75</td></tr></table> <div>Menu is redisplayed</div>	Interest	12 mos	24 mos	36 mos	48 mos	60 mos	72 mos	-----	-----	-----	-----	-----	-----	-----	1%	83.79	42.10	28.21	21.26	17.09	14.32	2%	84.24	42.54	28.64	21.70	17.53	14.75	<div>Monthly Payment</div> <table><tr><td>Interest</td><td>12 mos</td><td>24 mos</td><td>36 mos</td><td>48 mos</td><td>60 mos</td><td>72 mos</td></tr><tr><td>-----</td><td>-----</td><td>-----</td><td>-----</td><td>-----</td><td>-----</td><td>-----</td></tr><tr><td>1%</td><td>83.79</td><td>42.10</td><td>28.21</td><td>21.26</td><td>17.09</td><td>14.32</td></tr><tr><td>2%</td><td>84.24</td><td>42.54</td><td>28.64</td><td>21.70</td><td>17.53</td><td>14.75</td></tr></table> <div>Menu is redisplayed</div>	Interest	12 mos	24 mos	36 mos	48 mos	60 mos	72 mos	-----	-----	-----	-----	-----	-----	-----	1%	83.79	42.10	28.21	21.26	17.09	14.32	2%	84.24	42.54	28.64	21.70	17.53	14.75
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testDepositLetterInputMaximumInterestRate  Author: Eric Samuel	<i>Preconditions:</i> BankCalculator program started  Bank Calculator - Please choose an option.  L - Loan D - Deposit Q - Quit  Option: D Amount: 1000 Years: 2 Minimum interest rate: 1 Maximum interest rate: aax Invalid value  <b>&lt;ctrl + c to exit&gt;</b>	Invalid value  Menu is redisplayed	Invalid value  Menu is redisplayed
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